

De-Carbonizing the Campus: Planning, Tools & Technologies

CampusEnergy2023

February 27 – March 2, 2023

Gaylord Texan Resort & Convention Center | Grapevine, Texas



INTERNATIONAL
DISTRICT ENERGY
ASSOCIATION

Georgetown University A District Energy Partnership

Kevin Turner, Georgetown

Benton Erwin, Arup

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Director of Engineering
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Benton Erwin
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Agenda

- Why use a concessionaire approach
- Selecting a partner
- Alignment of outcomes
- Delivering successful outcomes

Why use a concessionaire approach

Environmental
Leadership

Utility
Infrastructure
Enhancements

Broad
Engagement for
Communitywide
Benefit

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Why use a concessionaire approach

Reduce
*energy-use intensity
by 35% by 2031*

Increase
*share of renewable
energy usage*

Mitigate
carbon footprint

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Why did Georgetown select ENGIE

Big.

Georgetown University's energy infrastructure delivers 123,202,860 kilowatts of electricity and 805,453 MBtus of natural gas annually.

Balanced.

The university owns the energy infrastructure and retains control over capital improvement decisions. ENGIE operates the campus utilities and works with Georgetown.

Built on Expertise.

Projects will benefit from ENGIE's global experience, their successful partnerships with other higher-ed institutions, and from advanced analytics, which will inform infrastructure decisions.

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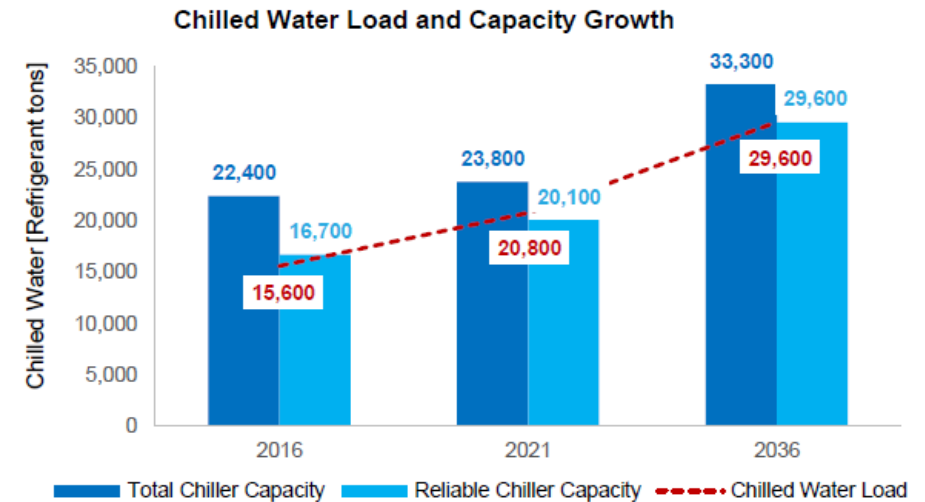
Alignment of outcomes

- Custom approach and agreed valuation
 - Define Objectives
 - Define Scope
 - Define Transaction
- Bilateral negotiation
 - Georgetown with advisors : ENGIE

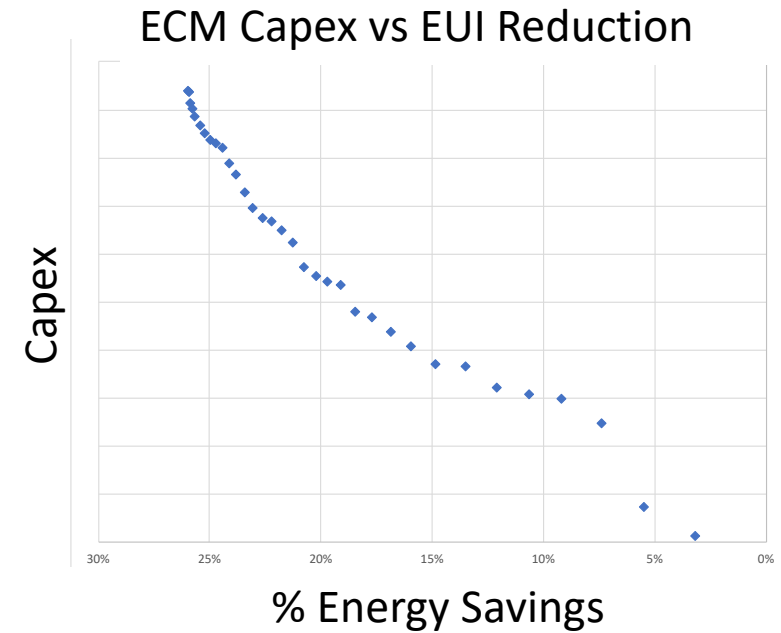
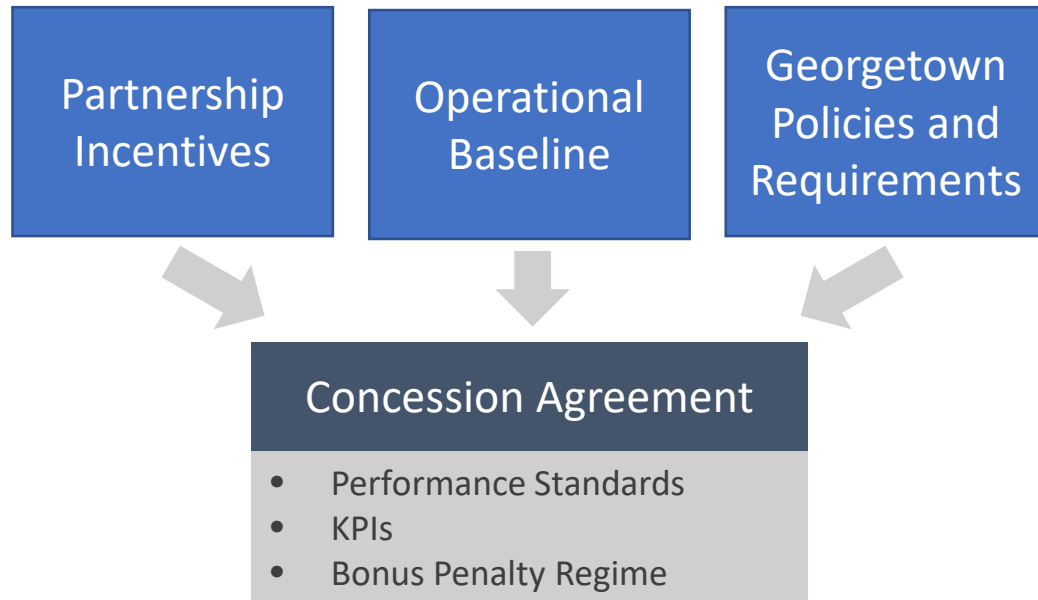


Valuation Inputs

- Agreed valuation model
- Business Plan
 - Opex and Capex Planning
 - Growth Capex



Technical and Commercial Inputs



Why ENGIE?

- ENGIE has decades of experience operating and maintaining campus utility systems
 - Multiple campuses within a Concession Agreement environment
 - Network of more than **225 university campus utility experts** that understand the campus environment
 - Generally, **university employees who transitioned** to ENGIE
 - Remain actively connected as a part of the campus community
 - Doing the same jobs, interacting with the same people
 - Maintaining valuable institutional knowledge

How was ENGIE Positioned for Success

**There is not a 'one size fits all' approach to university campuses.
Each Partnership is unique, but they do have some similarities...**

- **Diverse customers** eager to deliver outstanding experiences to their stakeholders
- All share **critical utility infrastructure** that supports campus, research institutions, hospitals, student housing and more
- Experienced **utility teams with long tenure**, dedicated to serving their community
 - Pride in **reliable and safe operations**
- **Competitive Environment** for funding

What are Additional Benefits to Georgetown

- **Interface** with a select subgroup of University stakeholders
 - Public vs Private
- **Offer connections** to personnel from other institutions
 - University and Operations/CAPEX members
- **Ask** the hard questions and **Request** appropriate data
 - Potential Optimizations/Improvements
- **Identify** what is being done well and what could use improvement
- **Share** our insight/lessons learned

Early Wins

- Transitioned 26 of the 28 actual Utility Employees to ENGIE on day 1
- Accelerated the initiation of the analysis of a campus Steam to HHW conversion
- Actively working to finalize a strategy to reduce/eliminate Scope 1 GHG associated with the Utility System in collaboration with University
- Additional projects to reduce/eliminate Scope 1 associated with transportation in Development
- 100% of the projects submitted in 1st two FYs were approved. Many of which are transitioning to full construction as well as another batch of projects submitted for FY24
 - ECMs on the path to 35% reductions
 - Large PV restoration
- Completed project that replaced utility infrastructure under a major sport field on campus on-time and budget
- Continuing to build collaboration between teams

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Thank You!



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